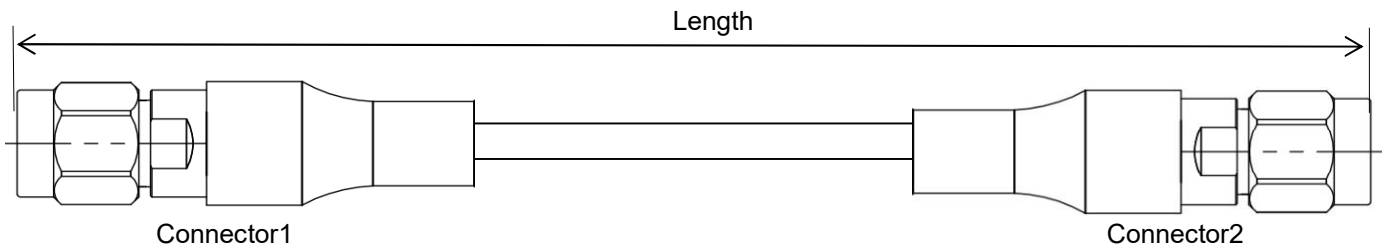


Low Loss Flexible Cable Replacing Semi-flexible Cable Assembly, Using SP280

DC-18 GHz, SMA Male to SMA Male

SP280-SMAMSMAM-L(L:Length)

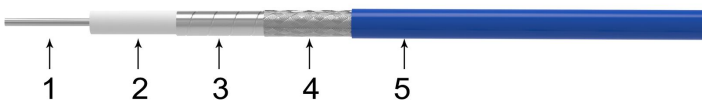


- Length can be in meter or in inch etc, e.g, SP280-SMAMSMAM-1M. Standard length tolerance: $\pm 1.5\%$. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	SMA male	Connector 2	SMA male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	SP280		

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.51	Silver plated copper
2	Dielectric	1.63	Solid PTFE
3	Outer Conductor	1.79	Silver plated copper tape wrap
4	Outer Shield	2.16	Silver plated copper wire braid
5	Jacket	2.80	FEP



Electrical

Frequency	DC-18 GHz
Impedance	50 Ω
VSWR Max	1.2
IL Max(1 meter assembly)	4.2dB
Velocity of Propagation	70%

Mechanical & Environmental

Min.Bending Radius Static	14mm
Min. Bending Radius Repeated	28mm
Temperature(Operation)	-50~85 °C
Temperature(Storage)	-60~85 °C

Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	14000	18000	26500	40000
dB/100 Meter	37.0	69.3	100.3	146.5	183.7	216.4	246.1	273.7	299.7	348.2	440.8	570.9
Avg.Power kW	0.187	0.100	0.069	0.047	0.038	0.032	0.028	0.025	0.023	0.020	0.016	0.012

$$\text{Attenuation at any frequency} = [2.066929 \times \text{SQRT}(\text{FMHz})] + [0.003937 \times \text{FMHz}]$$

- Notes:**
- 1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as $0.04\text{dB} \times \text{SQRT Freq}(\text{GHz})$.
 - 2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (SP280-SMAMSMAM-1M)

